R E P O R T R E S U M E S

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EFFECTS OF OFFERS OF FINANCIAL ASSISTANCE ON THE COLLEGE-GOING DECISIONS OF TALENTED STUDENTS WITH LIMITED FINANCIAL MEANS.

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REPORT NUMBER NMSC-RR-VOL-3-NO-5-1967 PUB DATE JUN 66
EDRS PRICE MF-$0.25 HC-$1.12 26P.

DESCRIPTORS- *TALENTED STUDENTS, *COLLEGE ATTENDANCE, *EDUCATIONAL FINANCE, *FINANCIAL SUPPORT, SCHOLARSHIPS, FINANCIAL PROBLEMS, TALENT UTILIZATION, QUESTIONNAIRES, DROPOUT CHARACTERISTICS,

THIS STUDY WAS CONDUCTED TO INVESTIGATE THE EFFECTIVENESS OF OFFERS OF FINANCIAL AID IN INCREASING COLLEGE ATTENDANCE OF TALENTED STUDENTS. SELECTION CRITERIA, BASED ON STANDING AS A NATIONAL MERIT PROGRAM FINALIST AND ON INABILITY TO ATTEND COLLEGE FOR FINANCIAL REASONS, YIELDED 1550 STUDENTS WHO SERVED AS SUBJECTS. QUESTIONNAIRES SENT TO THE STUDENTS OR THEIR HIGH SCHOOLS TWO YEARS AFTER GRADUATION RETURNED USABLE INFORMATION ON 99.7 PER CENT OF THE SUBJECTS. RESULTS INDICATED--(1) THOSE WHO RECEIVED OFFERS OF FINANCIAL AID WERE SIGNIFICANTLY MORE LIKELY TO ENTER COLLEGE THAN THOSE WHO RECEIVED NO OFFERS, (2) STUDENTS WITHOUT ASSISTANCE WHO ENROLLED IN COLLEGE WERE MORE LIKELY TO ATTEND A PUBLIC COLLEGE WITH LOW ANNUAL COST, LOCATED WITHIN 20 MILES OF HOME, (3) STUDENTS RECEIVING OFFERS OF FINANCIAL AID PRESENTED SUPERIOR ACADEMIC CREDENTIALS BUT THOSE NOT OFFERED AID WERE STILL VERY TALENTED, (4) STUDENTS ATTENDING COLLEGE WITHOUT FINANCIAL AID HAVE A POORER PERSISTENCE RECORD THAN THE OTHERS, AND (5) IN GENERAL, THE GREATER THE AMOUNT OF ASSISTANCE, THE GREATER THE STUDENT'S CHANCES FOR COMPLETING HIS STUDIES WITHOUT INTERRUPTION. IT IS CONCLUDED THAT SIGNIFICANT NUMBERS OF ACADEMICALLY TALENTED HIGH SCHOOL GRADUATES ARE PREVENTED FROM ENROLLING IN COLLEGE BECAUSE OF FINANCIAL NEED. NATIONAL CONCERN IS THEREFORE WARRANTED. (PS)

NMSC

ED017000

1967: volume 3, number 5

Effects of Offers of Financial Assistance on the College-Going Decisions of Talented Students with Limited Financial Means

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Abstract

A group of 1545 Merit Finalists with high financial need were followed up approximately two years after high school graduation. Those who received offers of financial aid (from National Merit or any other source) were more likely to enter college, were more likely to attend a private institution and were likely to persist in college than were the students who did not receive offers of financial aid.

Effects of Offers of Financial Assistance on the College-Going Decisions of Talented Students with Limited Financial Means

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Higher education in the United States, unlike public elementary and secondary education, is not free. The costs of college attendance pose a formidable barrier to higher education for many students; for some, an insurmountable one. While much has been published on the subject of financial aid to college undergraduates during the past decade, surprisingly few studies have involved experimental research on the nature of financial assistance and its impact on the college-going behavior of recipients. Thus, the effects of scholarships in reducing the loss of able, needy students to higher education are not well understood.

The transition from high school to college is a point of major talent loss from the educational process. Phearman (1949) studied 2,616 Iowa high school seniors of 1947 and found that only 29.8% of the graduates had enrolled in college. Of the students ranking in the top 2% among the graduates, 8% had not gone to college. Of those ranking in the top 9%, 36% had failed to enroll. Almost one-third (31.8%) of the nonattenders ranking in the top quarter among the graduates gave as their reason, "My parents could not afford to send me to college."

Wolfle (1954) provided the best national estimates of talent loss up to

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[1]The author was Scholarship Director at the National Merit Scholarship Corporation when this study was conducted. This report is based on a PhD dissertation submitted by the author to Northwestern University in June, 1966.

that time. Wolfle estimated that 40% of the 1953 high school graduates scoring among the highest 2.1% of intelligence tests failed to enter college. Of those graduates scoring in the top 31% and of all high school graduates, he estimated that 47% and 65%, respectively, did not go on to college.

Cole (1956) reporting on an Educational Testing Service study of students graduating from high school in 1955, observed that among the top 30% of the national sample, 51% of the students responded that they would really like to go to college, but only 45% expected to be able to do so. Berdie (1954) reported similar results from a study of 24,892 Midwestern high school seniors in 1950. Of 711 students scoring 120 or above on the American Council on Education Psychological Examination and planning to get jobs, 411 (58%) responded that they would attend college if they had more money. Thirty-eight per cent of all students (regardless of ability level) planning on working said they could not afford other plans.

In a series of statewide studies of the college plans of Wisconsin high school seniors, Little (1959) found that only 30% of the students (34% of the boys and 26% of the girls) planned to enroll in college. Forty-three per cent of the seniors not planning to continue their education indicated that their families could not afford to pay their way. A survey of the parents of students not going on to college revealed that 88% wanted their children to go, a third of these citing their inability to afford it as the reason for nonattendance. Of the 12% of the parents who did not want their children to continue their education more than 40% offered financial reasons such as, "it costs too much," "we want him to get a job," or, "the family needs the income." A special study of the seniors ranking in the top one-quarter of their class or scoring in the top one-quarter on the Henmon-Nelson Test of Mental Ability

reported lack of money as the major deterrent expressed by one-third to one-half of the 28% not planning to enroll in college.

Thistlethwaite (1958) found from a survey of a stratified random sample of 14,945 top-scoring students in the 1957 Merit program that 3.1% of the Merit Finalists and 5.1% of the Letter of Commendation winners (students scoring just below Finalists on the National Merit Scholarship Qualifying Test) were not enrolling in college. The percentage of girls failing to enroll was estimated to be 4.8%, slightly higher than that of the boys (3.5%). More than half of the nonattenders (52%) indicated that their parents could not afford to send them to college and 80% indicated they would enroll in college if they had more money. Thistlethwaite suggests that the loss would have been higher were it not for the public recognition afforded these students through the Merit program. He found that many of the students had received unsolicited offers of scholarships as a result of this recognition.

Bridgeman (1960) reviewed the estimates of Wolfle and the findings of Thistlethwaite, Little, and others and estimated the percentage of immediate college entrants following high school graduation as 37% of all graduates (41% of the boys and 32% of the girls); 58% of the upper 30% (65% of the boys and 50% of the girls); and 73% of the upper 10% (80% of the boys and 65% of the girls). In summarizing the findings of other studies as to the reasons for able students not enrolling in college, Bridgeman stated, "it is very difficult to generalize from this evidence with regard to the relative importance of economic and other factors in preventing students of upper level ability from entering college. It would appear that roughly half of such students who did not go would have done so if they had more money" (1944).

Flanagan, et al (1964) reported that 42% of the 1960 high school graduates

in the Project Talent sample (49% of the boys and 35% of the girls) enrolled in college within one year of their graduation. While these percentages are slightly higher than the estimates of Bridgeman, it may be due to the difference between immediate college entrance and enrollment within one year after high school graduation. The Project Talent finding of only 3.1% of the top 1% in ability failing to enroll in college is the same as Thistlethwaite's findings for Finalists in the 1957 Merit program. Half of the Project Talent students who did not enroll in college indicated that they could not afford it and 42% indicated that they had wanted to go. There was a strong relationship between college-going and family income.

An attempt to determine the effects of scholarships on the college attendance rate of students of limited financial means was conducted with support from the Fund for the Advancement of Education in New Mexico from 1952 to 1956, (Smith, Mathany, & Milfs, 1960). Candidates for scholarships were recommended by their high school principals as students who hoped to go to college but appeared unable to attend without financial assistance. Financial need was further assessed through confidential checks with scurces in the student's community. During the three years of the program's operation 212 of the 547 applicants were offered scholarships and 193 offers were accepted. All of the scholarship recipients entered college. A study of 242 of the unsuccessful scholarship applicants revealed that 60% had enrolled in college with financial aid from some other source; 21.5% enrolled without assistance and 28.5% did not enroll.

These studies suggest that financial considerations prevent some talented students from enrolling in college; however, the effectiveness of offers of financial aid in increasing college attendance of talented students has not been adequately investigated. Do all the students offered aid enroll in

college? If not, why not? Do some of the students not offered aid still find some way to attend college? If so, how? Would the students who were not offered assistance and who did not enter college have done so if the needed aid had been offered? This study was designed to find the answers to these questions by studying a group of academically talented students with extreme financial need.

Procedure

Subjects. The study population consisted of those Finalists in the Merit program who appeared to be unable to enroll in college without financial assistance.

In April of 1958, 478,991 second semester high school juniors and first semester high school seniors took the National Merit Scholarship Qualifying Test (NMSQT) in 14,454 high schools throughout the United States, Puerto Rico, and a few territorial and government schools. On the basis of their NMSQT scores, 10,334 students (the highest scores in each state) were selected as Semifinalists. Semifinalists are required to take a second test, the Scholastic Aptitude Test (SAT), and repeat their high performance before qualifying as Finalists in the Merit program. Two hundred and nine Semifinalists who failed to take the SAT and forty-two Semifinalists with low SAT scores were thus eliminated from further consideration. Another 215 students failed to submit the Student Information Form required of Finalists and were also eliminated. This loss of 466 students left 9,868 Finalists in the 1958-1959 Merit Program, the pool of talented students from which those who appeared unable to attend college without financial assistance were to be selected.

Although winners in the National Merit Scholarship Program are selected

without regard to their financial situation, each Finalist is asked to have his parents complete a confidential financial statement upon which his annual Merit Scholarship stipend will be based in the event he is selected a winner. Parents may either complete this required form or submit a request for the minimum stipend ($100 per year), stating that they feel with certain sacrifices they will be financially able to send the student to the college of his choice. Approximately 2,550 families requested the minimum stipend in the 1958-1959 program.

The parents of the remaining 7,300 Finalists had submitted a detailed financial statement suggesting that they could not afford to send the student to the college of his choice. It remained, however, to identify those students who appeared financially unable to enroll in any college, even the least expensive one available to them.

The 1959-1960 average cost of 126 publicly supported colleges surveyed by the investigator was $825 per year for tuition, required fees, room and board. No provision was made for books, laundry, travel or miscellaneous expenses in this $825 budget. Assuming a student to be able to earn $275 per year toward his college expenses, it would have required a minimum of $550 from his parents to bring his resources up the average of $825 annual cost of attendance at public institutions. On the basis of this analysis of what appeared to be minimal costs for a student to enroll in a low cost college away from home, only those Finalists whose parents seemed unable to contribute $550 per year were included in the study population.

The 1959-1960 College Scholarship Service need evaluation procedures, employed by more than 200 colleges and universities in 1959, was used to determine the effective net taxable income levels from which a $550 yearly

contribution would be expected (College Scholarship Service, 1958). Accordingly, maximum family incomes for inclusion in the study were set at $4,000 for a one-child family, $4,900 for a two-child family, $5,500 for a three-child family, $6,250 for a four-child family and $7,000 for a family of five or more children.

These selection criteria resulted in a sample of 1,550 Merit Finalists who were presumed to be unable to attend college for financial reasons. These students were all of high ability as is indicated by their selection as Merit Finalists. Their median rank in class was the 96th percentile, and their mean SAT scores were 642 verbal and 661 mathematical.

The Followup Survey. In August 1961, approximately two years after the 1,550 students had been scheduled to graduate from high school, they were mailed a questionnaire concerning college attendance and offers of financial aid. Responses were obtained from 1,359 students (88%).

Questionnaires were sent to the secondary schools of the nonrespondents, and of the sixty-eight respondents who had indicated that they had not enrolled in college. In only five instances were the high schools unable to provide the desired information. Thus, usable information was received for 1,545 (99.7%) of the students included in the study. A summary of sources of information for the study is shown in Table 1.

Table 1

Sources of Data

Source of Information	Number of Students
From student questionnaires only	1238 (80%)
From high school questionnaires only	186 (12%)
From both student and high school	121 (8%)
Total	1545

As a reliability check, student and high school responses were compared for the 121 cases where information was received from both sources. No significant discrepancies were observed. Other information for the study was obtained from the students' NMSC Information Form.

Results

A comparison between Finalists in the 1959 Merit program meeting the financial need criterion and those who did not is shown in Table 2. Significantly more needy students came from the Great Lakes and Plains states and the Southeastern states, and fewer from the North Atlantic Region. The needy Finalists planned careers in engineering, teaching, and the ministry more often than did their non-needy counterparts. They less often were undecided and less often planned on careers in law, government service and business. They also tended to choose public colleges.

The educational level of the parents of students included in the study group is shown in Table 3. While more of the students' mothers and fathers had completed elementary school and entered high school, fewer had attended college. The median grade level completed by both mothers and fathers was the twelfth grade. In most cases where the student's father was college educated and his occupation was reported as professional, the father was deceased.

The primary purpose of this study was to determine whether or not there were significant differences in the frequency of college enrollment of financially needy students offered financial assistance and those who were not offered such aid. Table 4 shows the frequencies of student college-going behavior relative to offers of financial assistance.

Table 2

Percentage of "Needy" and "Non-Needy" Merit

Finalists with Selected Characteristics

Characteristic	Needy N=1545	Non-Needy N=8789	Statistical Significance of Difference
Sex			
Male	64.5	65.3	
Female	35.5	34.7	
Geographic Region			
Great Lakes and Plains	36.8	30.4	<.001
North Atlantic	17.7	25.9	<.001
Southeast	24.6	21.7	<.02
West and Southwest	20.7	21.6	
Other Territories	0.3	0.4	
Intended Career			
Research	23.4	25.0	
Teaching	20.6	17.4	<.01
Engineering	22.8	16.8	<.001
Medical Science	9.3	10.0	
Law	2.6	4.4	<.001
Government	1.6	3.0	<.01
Writing, Journalism	2.6	3.1	
Business	2.2	3.2	
Social Work	1.2	1.0	
Ministry	1.9	1.0	<.01
Psychology	1.6	1.5	
Architecture	0.8	0.8	
Miscellaneous	3.6	3.2	
Undecided	5.8	9.7	<.001
College Choice			
Public	41.3	25.4	<.001
Private	58.7	74.6	<.001

Table 3

Education of Parents of Needy Students

Highest Grades Completed	Father		Mother	
	Number	Cumulative Percentage	Number	Cumulative Percentage
Less than eighth grade	85	5.7	51	3.4
Eighth grade	223	20.7	140	12.6
Ninth to eleventh grade	241	36.9	213	26.7
Twelfth grade	497	70.3	674	71.2
Thirteenth to fifteenth grade	174	82.0	242	85.4
Sixteenth grade	181	94.2	169	98.3
Over sixteenth grade	86	100.0	26	100.0
Not reported	58		30	

Table 4

Offers of Financial Aid and College Enrollment

Aid	College Enrollment		Total
	Enrolled	Did not Enroll	
Offered aid (from any source)	1306	30	1336
Not offered aid	159	50	209

Chi Square = 169.16, $p<.001$

While only thirty (2.2%) of the 1,336 students offered financial assistance (from National Merit or any other source) did not enroll in college in September 1959, fifty (23.9%) of the 209 students not offered aid failed to enroll. This difference is highly significant statistically.

The Students who were not Offered Assistance. Table 5 shows a comparison of students who were offered financial aid and those who were not. The sex

difference proved to be significant at the .05 level; a higher percentage of the students who received no offer were male. The differences in mean SAT scores and rank in high school class all showed the students receiving offers of assistance to be academically superior.

While it is clear that the students receiving offers of financial assistance presented, on the average, superior academic credentials, the students not offered aid were still very talented. Almost one-fourth ranked in the top 2% of their high school class and their average SAT scores of 628.6 Verbal and 636.9 Mathematical exceed the entering freshmen averages of many highly selective colleges

Table 5

Comparison of Students Offered Aid and Those Who Were Not

Characteristic	Offered Aid N=1336	Not offered Aid N=209	Statistical Significance
Sex			
Male (996)	68.5%	71.3%	<.05
Female (549)	31.5%	28.7%	
Mean SAT Verbal Score	643.7	628.6	<.001
Mean SAT Math Score	665.1	636.9	<.001
Rank in high school class			
Top 1%	499 (38.9%)	38 (19.6%)	
Top 2%	138 (49.6%)	9 (24.2%)	
Top 5%	252 (69.2%)	47 (48.5%)	
Top 10%	204 (85.1%)	38 (68.0%)	
Top 25%	152 (97.0%)	44 (90.7%)	
Top 50%	38 (99.9%)	17 (99.5%)	
Bottom 50%	1 (100.0%)	1 (100.0%)	
Total	1284	194	
Rank not reported	52	15	

How did 159 of these students enroll in college without financial assistance? Table 6 shows the type of college preferred by the students and the type of college in which they enrolled. The students enrolling without aid more often preferred and enrolled in public institutions. While only 17.2% (221) of all the students enrolling with aid enrolled in a different type institution than their preference and 82.6% of those preferring private institutions actually enrolled in this type, 33.8% (53) of the students without aid enrolled in a nonpreference type institution and only 35.9% of those preferring private colleges enrolled in that type.

Table 6

Preferred and Actual College of Enrollment: Type

College Preference	College Enrollment			Total
	Private	Public	Unaccredited	
		Students Without Aid		
Public	7	81	1	89 (56.0%)
Private	23	38	3	64 (40.3%)
Unaccredited	3	1	0	4 (2.5%)
Undecided	0	2	0	2 (1.2%)
Total	33 (20.8%)	122 (76.7%)	4 (2.5%)	159(100.0%)
		Students With Aid		
Public	66	421	3	490 (37.5%)
Private	642	131	4	777 (59.5%)
Unaccredited	14	3	2	19 (1.5%)
Undecided	7	13	0	20 (1.5%)
Total	729 (55.8%)	568 (43.5%)	9 (.07%)	1306(100.0%)

Table 7

Distance from Home to College

Distance	Enrolled With Aid	Number Commuting	Enrolled Without Aid	Number Commuting
Less than 20 miles	228 (19.2%)	181	35 (33.3%)	32
20-40 miles	79 (6.7%)	14	6 (5.7%)	4
40-100 miles	220 (18.5%)	4	12 (11.4%)	2
100-1000 miles	538 (45.5%)	0	44 (41.9%)	0
More than 1000 miles	104 (8.8%)	0	5 (4.8%)	0
Not reported	17 (1.4%)		3 (2.9%)	
Totals	1186(100.0%)	199	105(100.0%)	38

Table 7 shows the distance from the student's home to his college and the number of students who commuted. The students who enrolled in college without assistance more often attended institutions within twenty miles of their homes than did the students with assistance. Whereas only one of every six students with aid commuted to college from his home, more than one-third (36.2%) of the students without aid commuted.

Table 8 shows the distribution of annual costs of the colleges in which the students with aid and those without aid enrolled. Only 7% of the students with aid enrolled in colleges with annual costs less than $700 compared to 28.6% of the students without aid. While almost half of the aided students attended college at an annual cost of more than $1600, less than 20% of the group without aid did so.

Thus, the 159 students enrolling in college without aid more often attended publicly supported colleges, colleges with low annual costs, and more often commuted from home than did their counterparts who received assistance.

Table 8

Annual Cost of College Attendance

Annual Cost	Enrolled with Aid		Enrolled without Aid	
	Number	Cumulative Per Cent	Number	Cumulative Per Cent
Less than $300	21	1.8	7	6.7
$300-$499	30	4.3	11	17.2
$500-$699	32	7.0	12	28.6
$700-$999	102	15.6	7	35.3
$1000-$1199	137	27.2	18	52.4
$1200-$1399	166	41.2	15	66.7
$1400-$1599	135	52.6	11	77.2
$1600-$1999	174	67.3	6	82.9
$2000-$2499	171	81.7	8	90.5
$2500-$2999	137	93.3	3	93.4
$3000 and over	45	97.1	1	94.3
Not reported	36	100.0	6	100.0
Total	1186		105	

Were there differences in the persistence of college attendance between the students who enrolled with assistance and those who attended without aid? Table 9 shows the relationship between offers of aid and persistence in college. Only student responses are included in this and subsequent tables since the high school reports did not provide these data. While only 16.9% of the students with financial aid interrupted or discontinued their studies during their first five semesters (September 1959 through fall term registration 1961), 34.3% of the students without aid withdrew during this period. Interestingly, not only does the table show the significantly poorer persistence record of the students who enrolled in college without financial assistance, but a direct relationship between college persistence and the number of offers of assistance received by the students.

Table 9

Offers of Aid and Persistence of College Attendance

Number of Offers	Number of Students	Percentage Interrupting Studies During First Five Semesters
0 (no offer)	105	34.3
1	469	20.7
2	349	16.3
3	247	15.4
4 (or more)	121	7.4
Total	1291	18.4

Table 10

Student Reasons for Interruptions of Studies

Reason	Enrolled with Aid	Enrolled without Aid
Financial	73 (36.3%)	21 (58.3%)
Marriage	18 (9.0%)	2 (5.6%)
Lacked Motivation	12 (6.0%)	2 (5.6%)
Illness	20 (10.0%)	2 (5.6%)
Military Service	7 (3.5%)	0
Enter Religious Order	8 (4.0%)	2 (5.6%)
Academic Difficulty	13 (6.5%)	1 (2.8%)
Academic and Financial	19 (9.5%)	0
Deceased	5 (2.5%)	1 (2.8%)
Personal or Unexplained	26 (12.9%)	5 (13.9%)
Total	201 (100.0%)	36 (100.0%)

To summarize, examination of the characteristics of the students who enrolled in college without financial aid indicates that they usually attended college under less than optimal conditions: they frequently commuted to

low-cost colleges near their homes, often reported that they had experienced financial difficulties, and in general, were less likely to complete their college studies without interruption than their counterparts who received financial assistance.

The Sources of Financial Assistance. Table 11 reports the sources of major financial assistance offers received by student respondents, the median dollar value of the offers, and the persistence of college attendance of students accepting offers from the various sources. With the exception of the students who borrowed National Defense Student Loan Funds as their primary source of assistance, the average interruption rate was approximately 16 per cent. Fifteen of the 33 National Defense Student Loan Program borrowers, however, interrupted their studies during the first five semesters, an interruption rate of 45.5%. While the number of cases was too small to draw any conclusion with confidence, voluntary comments from several of the National Defense Student Loan Program borrowers suggested that they had reached a level of indebtedness which psychologically prevented them from further borrowing until they had repaid part of their loans.

Table 12 shows the relationship between the dollar value of assistance received by the students and their college persistence. The data suggest that the greater the amount of assistance, the greater the student's chances for completing his studies without interruption. This may be due either to the greater amount of financial security afforded the student or to the generally lower attrition rates of the more expensive private institutions, the likely source of the large offers.

The Students Who Did Not Enroll in College. The 80 students who did not enroll in college in September 1959 represented 5.2% of the 1545 students

Table 11

Source of Aid, Median Dollar Value and

Persistence of College Attendance

Source of Aid	Median Value	Number of Students	Percentage of Students Interrupting Studies
College or University	$689	666 (52.2%)	17.7
State (California, New York, Illinois)	743	59 (5.0%)	15.6
National Merit Scholarship Corporation	1278	134 (11.3%)	14.2
General Motors	1533	35 (2.9%)	14.3
National Defense Student Loan Program	829	33 (2.8%)	45.5
All other sources	757	259 (21.8%)	13.9
Total with aid		1186 (100.0%)	16.9
Total without aid		105	34.3

Table 12

Dollar Value of Aid and Persistence of College Attendance

Dollar Value	Number of Students	Percentage of Students Interrupting Studies in First Five Semesters
$1-$399	308	23.4
$400-$799	272	17.6
$800-$1199	228	13.2
$1200-$1599	158	15.8
$1600-$1999	100	11.0
$2000 (and over)	86	10.5
Not reported	34	17.6
Total with aid	1186	16.9
Total without aid	1055	34.3

included in the study. Thirty of these students received offers of financial aid. Why did these thirty students not enroll in college? At the outset it should be noted that students were classified as receiving an offer of assistance without regard to the adequacy of the offer. Thus, in eleven cases of students classifed as having received an offer, but not enrolling in college, both the student and his high school claimed that the offer had been inadequate and that the student would have enrolled in college if an offer of aid had made it financially possible. A few of the offers were restricted for use at colleges in which the students had no interest. In seven additional cases the high schools indicated that while finances had not been the primary reason for the student's failure to enroll in college, he might have enrolled if a more generous offer of financial assistance had been received. The remaining twelve students clearly failed to enroll for other than financial reasons: six married; two preferred to enter religious orders; two apparently lacked interest in college; one preferred a noncollegiate nursing program; and one student did not enroll because her parents objected to college for religious reasons.

How many of the fifty students who were not offered aid and who failed to enroll in college, would have enrolled if adequate aid had been offered? Student and high school responses indicated that at least thirty-one of the fifty students had failed to enroll primarily for financial reasons, and would have enrolled in college if they had been offered the needed assistance. In nine other cases the high school reports suggested that the reasons were in part financial and that the students might have attended college if aid had been offered. Four of the remaining ten students enlisted in the military services, apparently lacking the desire to enter college immediately

(although most expressed the desire to attend later); three students married; one entered a religious order; one claimed to lack motivation; and one cited illness.

One can only speculate as to how many of the eighty nonattenders actually would have enrolled in college in September 1959 if their financial needs had been satisfied through realistic offers of assistance. All were certified to possess high academic ability; all apparently desired to go on to college at the time they were identified as Merit Scholarship Finalists. In most all of the cases the students' high schools verified their need for financial assistance. Many of the students reported that they had worked to earn enough money to begin college, and that, subsequently, they had enrolled.

The student and school reports suggest that forty-two (53%) of the students almost certainly would have enrolled in college in September 1959 if they had found it financially possible to do so. And an additional sixteen (20%) might have enrolled if adequate aid offers had been received. In twenty-two cases (28%) marriage, lack of interest, or a preference to enter the military services, a religious order, or a noncollegiate nursing program seems to have been the primary reason for the student not enrolling in college.

Discussion

Significant numbers of academically talented high school graduates, desirous of enrolling in college, are prevented from doing so because they lack the necessary financial means. Others, similarly in need of assistance, somehow manage to begin their college studies, often commuting to low-cost publicly supported institutions near their homes, but these students frequently are forced to interrupt or discontinue their attendance as a result of financial difficulties. Offers of financial assistance to talented

students with limited financial means are effective in reducing such talent loss by enabling the student to enroll in college immediately after high school graduation and by providing the financial means for him to continue his studies without interruption.

The full extent of America's talent loss resulting from the financial inability of talented students to enroll in and complete college studies is not accurately known. In this study's sample of 1545 students ranking among the top 2% of the nation's high school graduates, 94 students who enrolled in college reported that they had been forced to interrupt their studies for financial reasons. Another 42 students who did not enroll in college cited their financial inability to do so. There are indications (from the high school reports) that another 16 students who did not go on to college might have done so if they had received the assistance they required. Thus, even at this high talent level, between 8.8% and 9.8% of the students either failed to enroll in college or enrolled but interrupted their attendance for financial reasons. It is likely that the loss would have exceeded 10% if the college persistence of the students had been checked in their seventh or eighth semester rather than their fifth.

While it is possible that the greater college attendance of the aided group may have resulted in part from their higher ability and a stronger desire for higher education, it is clear that the nonattenders were sufficiently talented and motivated to warrant our national concern.

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4. Study of College Environments Using Path Analysis, by C. E. Werts.

NMSC research in supported by grants from the National Science Foundation, the Carnegie Corporation of New York, and the Ford Foundation

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